



NORTH CAROLINA

Department of Transportation



5-Year Spending Plan for the Freight Rail and Rail Crossing Safety Improvement Program (FRRCSI)

Sandra Stepney, Planning & Development Branch Manager

January 11, 2018



Session Law 2017-57 Sec. 34.23

GENERAL ASSEMBLY OF NORTH CAROLINA

Session 2017

**Drafting
SPECIAL PROVISION**



2017-TRANS-H24(S34.23)i

**Department of Transportation
House Appropriations, Transportation**

RAIL DIVISION/FIVE-YEAR SPENDING PLAN FOR FRRCSI

SECTION 34.23. The Rail Division of the Department of Transportation shall develop a five-year spending plan for the funds in the Freight Rail & Rail Crossing Safety Improvement Fund within the Highway Fund. The Rail Division shall submit its five-year spending plan to the Joint Legislative Transportation Oversight Committee by December 1, 2017.



Freight Rail & Rail Crossing Safety Improvement Fund History

Established in 2013 under NCGS § 124-5.1.

- Funds allocation to NCDOT began 2014
- \$3.75 M has been funded annually from cash dividends by statute from North Carolina Railroad (NCRR)
- In FY 2017 & 2018, there was an additional appropriation beyond the NCRR dividends

FRRCSI Historical Allocations

2014	\$19.2M
2015	\$3.75M
2016	\$3.75M
2017	\$17.5M
2018	\$17.5M





Program Goals

- **Improve Safety** – track and infrastructure improvements, protect or eliminate grade crossings, remove hazards
- **Modernize Track Infrastructure**
- **Increase Freight Capacity** – assist with projects to improve rail access to port and military facilities
- **Support Economic Development** – assist with spur tracks/access
- **Divert Freight from Highways to Rail** – assist with freight intermodal facility improvements
- **Preserve Rail Corridors** for future transportation use and economic development





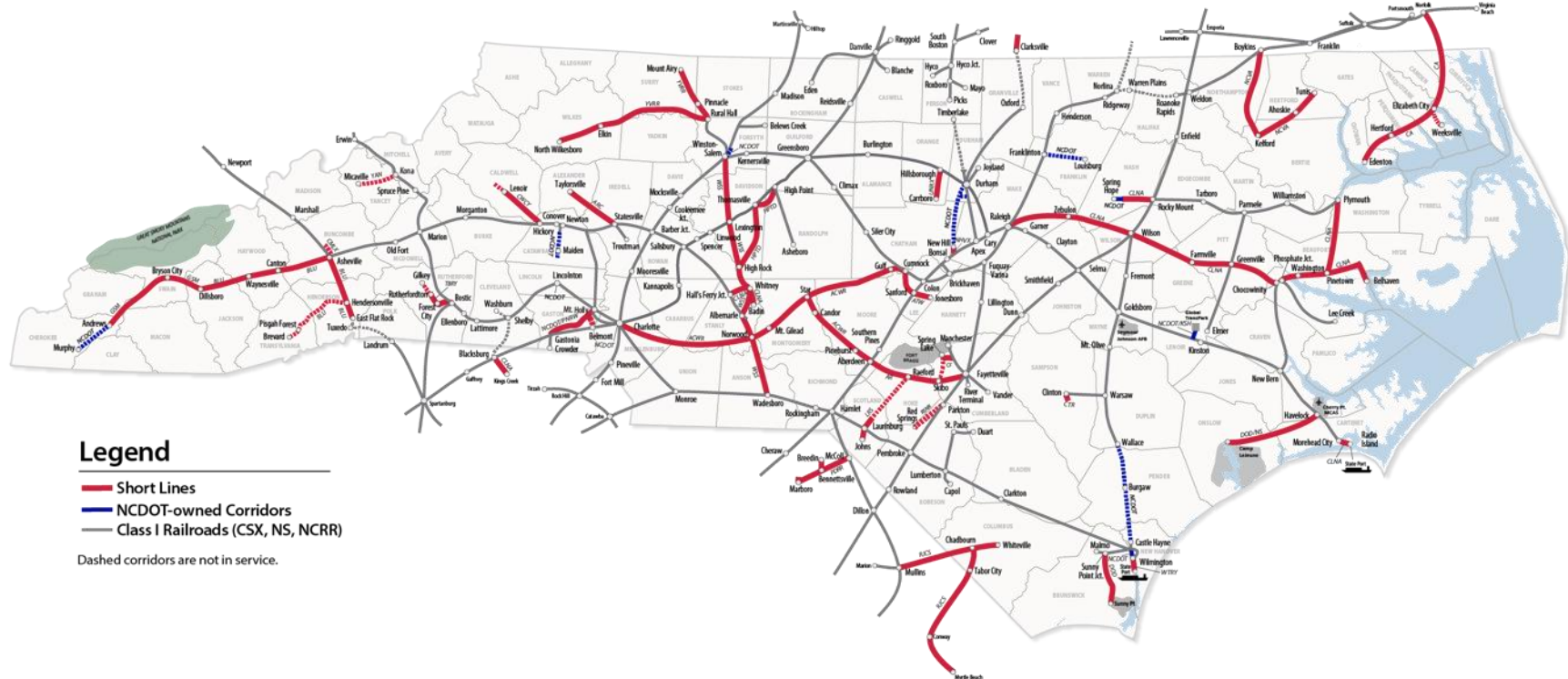
Program Benefits

- FRRCSI funds have enabled Short Lines to make improvements to the railroads that otherwise would not have been affordable.
- The improvements have helped Short Lines to add new customers, and enabled current customers to expand capacity to 286,000 lbs. weight limits.
- The value of FRRCSI as a predictable funding source allows Short Lines to program their capital contributions over multiple years.
- FRRCSI funding allows for planned investment in infrastructure, and employs railroad crews, track construction contractors, and suppliers.



North Carolina Short Lines

In North Carolina there are 22 Short Line Railroads operating in 56 Counties



North Carolina Class I Lines

There are 2 Class I Railroads operating in 66 Counties





Funding Eligibility Categories

	Class 1 Railroads	Short Line Railroads	NCDOT
Short Line Infrastructure Assistance Program (SIAP) <ul style="list-style-type: none"> Information from application is scored using data driven criteria and formulas Based on available funding, highest scoring projects receive funding 		X	
Rail Industrial Access Program (RIAP) <ul style="list-style-type: none"> Projects are scored on a point scale based on capital investment, jobs created, rail cars, location and rail line 	X	X	
Crossing Safety <ul style="list-style-type: none"> Based on available funding, projects are selected utilizing established crossing safety prioritization methods 	X	X	X
Corridor Preservation <ul style="list-style-type: none"> Projects are selected based on State Rail Plan and analysis for potential future use and service to sites for economic development 			X





SIAP & RIAP Projects & Funding 2014-2018

RIAP – 10 projects

2,215 jobs created

\$1.6M leveraged by \$21.8M in rail spur investment and \$637M in capital

In Progress:

- Clearwater Paper (Cleveland Co)
- Borealis Compounds (Alexander Co)
- Troy Lumber

Western NC – 222 Jobs

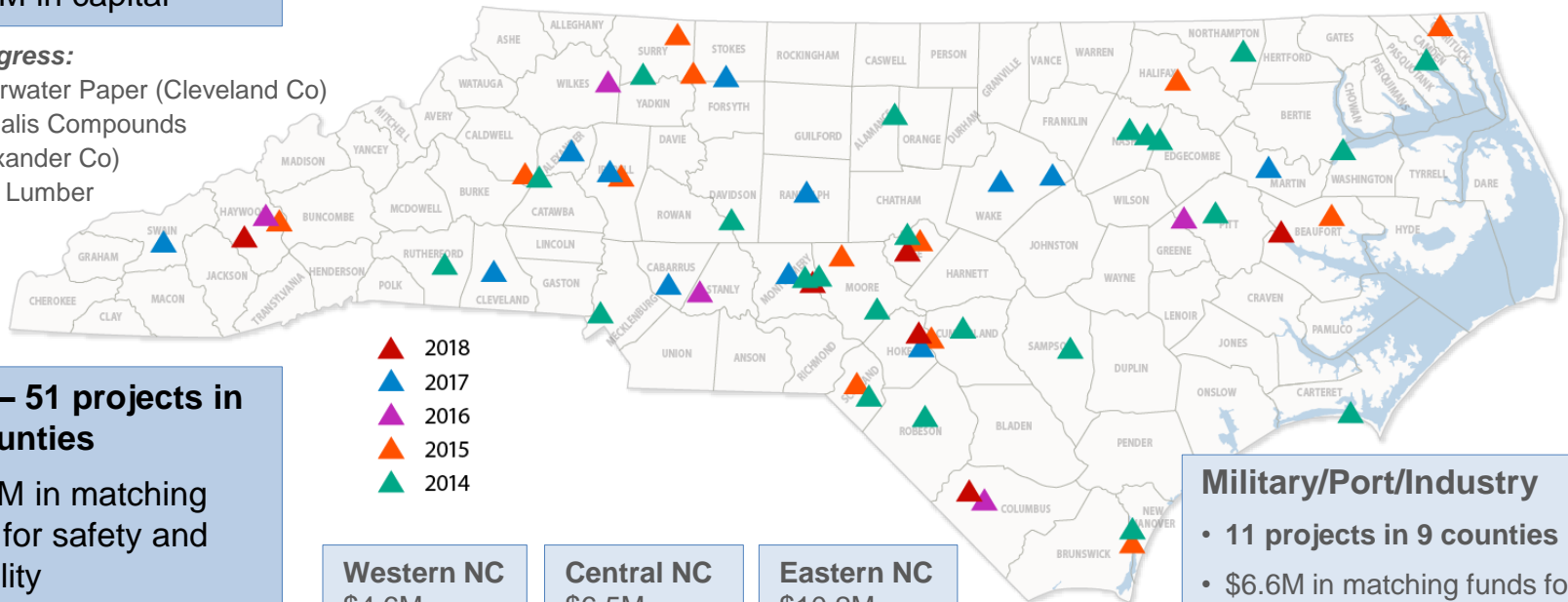
- \$375K leveraged by \$2.6M in rail spur investment and \$345M in capital

Central NC – 394 Jobs

- \$640K leveraged by \$10M in rail spur investment and \$117M in capital

Eastern NC – 1,599 Jobs

- \$600K leveraged by \$9.2M in rail spur investment and \$175.3M in capital



SIAP – 51 projects in 42 counties

\$21.3M in matching funds for safety and reliability

Projects in every Highway Division except 7

Western NC
\$4.6M

Central NC
\$6.5M

Eastern NC
\$10.2M

Military/Port/Industry

- 11 projects in 9 counties
- \$6.6M in matching funds for diversion of trucks from highway to rail



Crossing Safety Projects & Funding 2014-2018

Crossing Consolidation & Safety

- 32 projects totaling \$15.14M
 - 17 closures
 - 15 crossing improvements

Crossing Surfaces

- 96 projects totaling \$4.9M

Western NC

- 32 Projects
- \$1.7M

Central NC

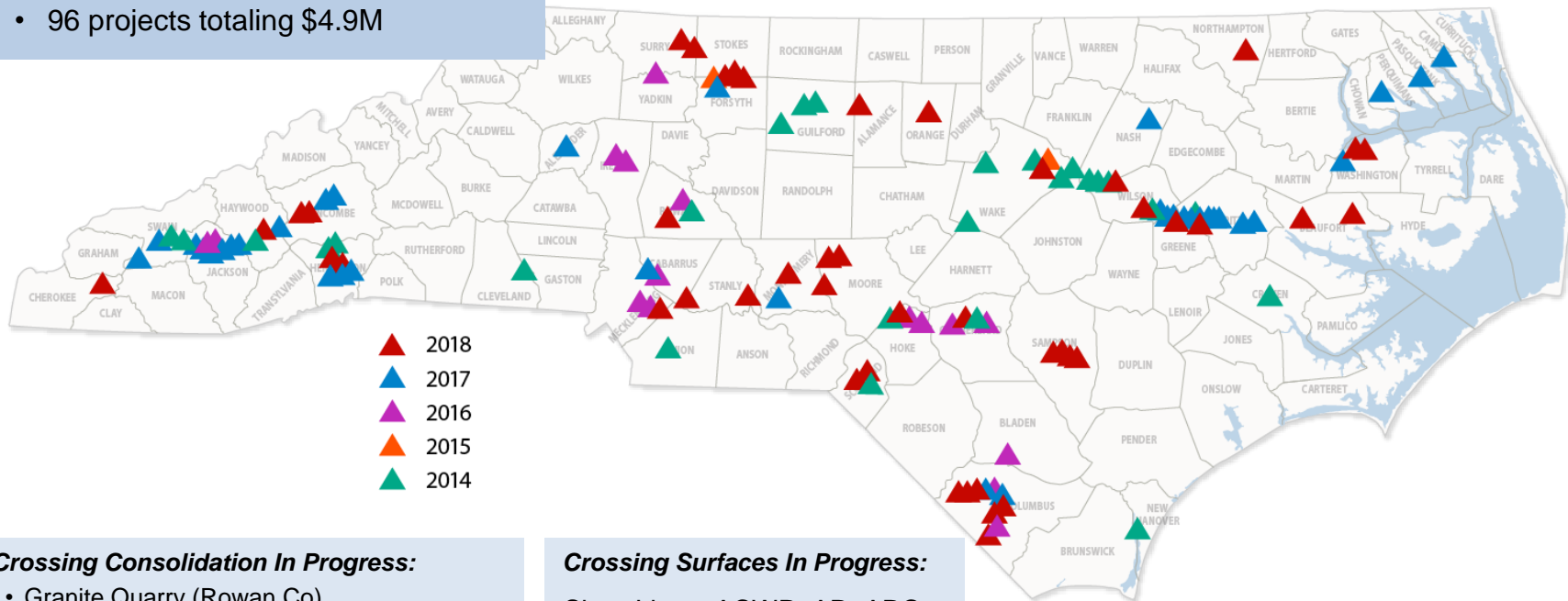
- 58 Projects
- \$15.7M

Eastern NC

- 39 Projects
- \$1.9M

Statewide

- 4 Projects
- \$2M



Crossing Consolidation In Progress:

- Granite Quarry (Rowan Co)
- Henderson Grove Church Road (Rowan Co)
- Gordon Thomas, Byrdsville, Greenbrier (Orange Co)

Crossing Surfaces In Progress:

Short Lines: ACWR, AR, ARC, ATW, BLU, CA, CLNA, CMR, LRS, YVRR, RJCS, RSN



5-Year Spending Plan

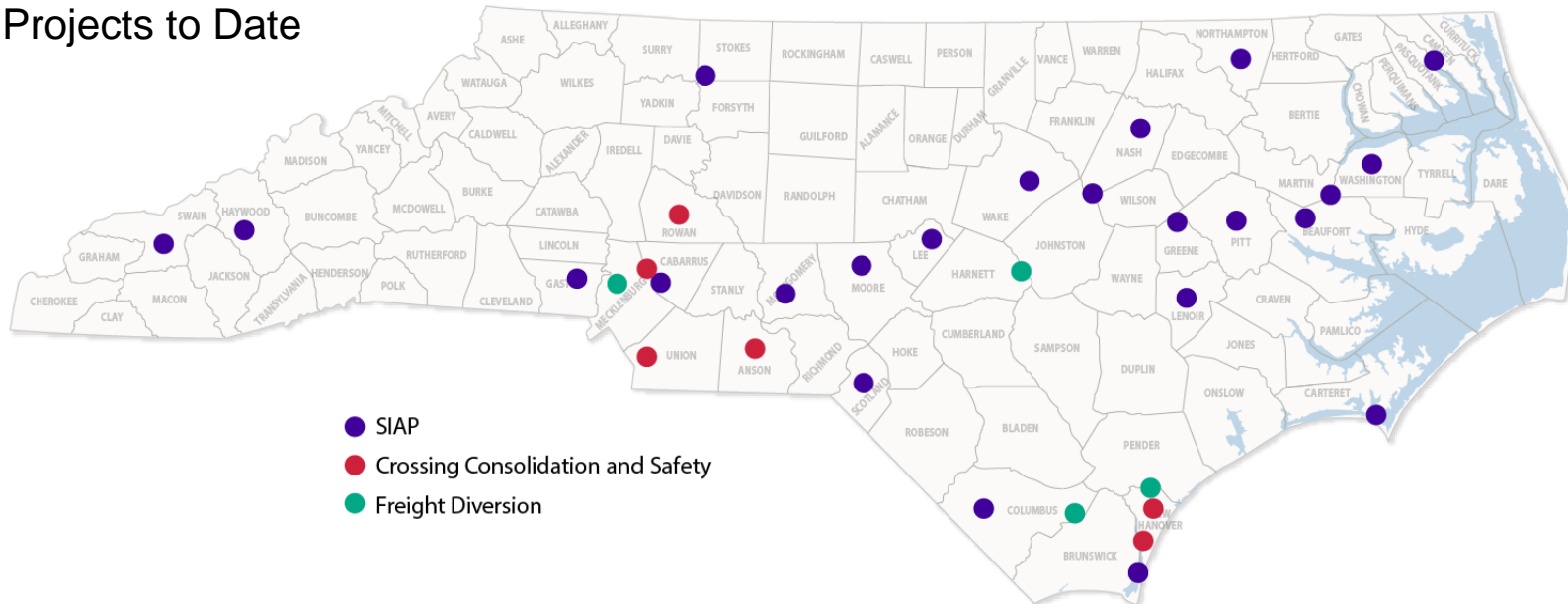
Freight Rail and Rail Crossing Safety Improvement (FRRCSI) Capital Plan
SFY 2018-2022

NCDOT Rail 5-Year Spending Plan – Summary*

* In Millions

Category	SFY 2018 Actual Submittals	SFY 2019	SFY 2020	SFY 2021	SFY 2022
Short Line Infrastructure Assistance Program	\$14.575	\$45.816	\$30.492	\$31.054	\$27.473
Crossing Consolidation and Safety	\$8.650	\$6.500	\$6.500	\$3.500	\$0.500
Corridor Preservation	\$0.250	\$4.250	\$0.250	\$0.250	\$0.250
Freight Diversion	\$1.251	\$46.000	\$44.000	\$41.000	\$26.000
Rail Industrial Access Program		\$2.000	\$2.000	\$2.000	\$2.000
GRAND TOTAL	\$24,725,594	\$104,564,600	\$83,242,100	\$77,803,600	\$56,223,100

Upcoming FRRCSI Projects to Date





5-Year Spending Plan

Freight Rail and Rail Crossing Safety Improvement (FRRCSI) Capital Plan SFY 2018-2022

Counties	Railroad	Railroad	Description	Total Est. Cost (Millions)	SFY 2018	SFY 2018 Actual Submittals	SFY 2019	SFY 2020	SFY 2021	SFY 2022
SIAP Track Infrastructure										
Buncombe, Haywood, Jackson, Henderson	BLU	BLU	Installation of crossties and ballast, surface, and modernize bridges on T and W Lines to harden the railroad.	\$3,183,550	\$639,750	\$1,809,600	\$626,200	\$632,700	\$639,200	\$645,700
Buncombe, Haywood, Jackson, Henderson	BLU	BLU	Installation of crossties and ballast, surface, and modernize bridges on T and W Lines.	\$3,183,550	\$639,750		\$626,200	\$632,700	\$639,200	\$645,700
Buncombe, Haywood, Jackson, Henderson	BLU	BLU	Installation of crossties and ballast, surface, and modernize bridges on T and W Lines. Submitted for FY 2018: Upgrade bridges T 15.7, 38, 39.9, 40.3, 44.	\$4,353,400	\$639,750		\$626,200	\$632,700	\$639,200	\$645,700
Scotland	LRS	LRS	Removal of 67 lb. and 85 lb. rail and upgrade to 100lb or heavier rail between Laurinburg and Wagram.	\$2,500,000	\$500,000		\$500,000	\$500,000	\$500,000	\$500,000
Forsyth Surry Wilkes	YVRR	NS	Rail Replacement on K Line between Rural Hall and Roaring River. Rail Replacement on CF Line between Rural Hall and Mt. Airy. Submitted for FY 2018: Rail replacement in curves on K Line. Tie replacement on K and CF Lines.	\$4,710,073	\$700,000	\$1,210,072	\$700,000	\$700,000	\$700,000	\$700,000
Northampton Bertie	NCVA	NCVA	25 miles of rail Replacement, 25,000 ties, and 50 miles of surfacing to harden the railroad.	\$10,400,000	\$2,080,000		\$2,080,000	\$2,080,000	\$2,080,000	\$2,080,000
Pasquotank	CA	NS	Bridge replacement at MP 41.5 in Elizabeth City	\$70,000,000			\$28,000,000	\$14,000,000	\$14,000,000	\$14,000,000
Pasquotank	CA	NS	Major bridge rehabilitation at MP 41.5 in Elizabeth City	\$20,000,000			\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Pasquotank Camden Currituck	CA	NS	Rail Replacement, Ties, Surfacing from MP 22 to 51 from Moyock to Elizabeth City. Cross tie replacement and surfacing from MP 22.2 to 51, bridge upgrades at MP 23.2, 29.3, 36.4, 36.6, 36.71, 43.2, 46.5.	\$9,746,350		\$746,350	\$3,000,000	\$3,000,000	\$3,000,000	
Lee	ATW	ATW	7 miles of rail replacement. 15 miles of surfacing and ballast near Sanford. Submitted for FY 2018: Sanford yard upgrade of 4 turnouts.	\$2,207,000	\$456,000	\$383,000	\$456,000	\$456,000	\$456,000	\$456,000
New Hanover	WTRY	NCSPA	1.1 miles of rail replacement, replace 3 turnouts, and 3.5 miles of surfacing and ballast.	\$1,008,000				\$1,008,000		
Nash	CLNA	CLNA	Replace 85# Rail with 100# Rail, Ties, Surfacing on ABA MP 120 - 134 between Rocky Mount and Momeyer. Submitted for FY 2018: Replace 85# Rail with 100# Rail, Ties, Surfacing on ABA MP 130 - 132 in Nashville. Bridge repairs at NS 126.1, NS 143.7, NS 143.9, NS 146.5, BH 3.5, BH 4.5, BH 7.8.	\$1,800,950		\$750,950	\$1,050,000			
Beaufort Pitt Green Wilson	CLNA	NS	Replace 100# Rail with 115 # Rail, Ties Surfacing on NS Line from MP 132 to 194 between Chocowinity and Sims	\$2,000,000					\$2,000,000	



5-Year Spending Plan

Freight Rail and Rail Crossing Safety Improvement (FRRCSI) Capital Plan SFY 2018-2022

Counties	Railroad	Railroad	Description	Total Est. Cost (Millions)	SFY 2018	SFY 2018 Actual Submittals	SFY 2019	SFY 2020	SFY 2021	SFY 2022
SIAP Track Infrastructure										
Wilson Nash Johnston Wake	CLNA	NS	Replace 132# Rail, Ties, and Surfacing on NS Line from MP 194 to 228 between Sims and Raleigh	\$1,125,000	\$1,125,000					
Beaufort Washington	CLNA	NS	Ties and Surfacing on NS line from MP 90 to 128 between Plymouth and Chocowinity	\$975,000			\$975,000			
Beaufort	CLNA	CLNA	Ties and Surfacing on BH line from MP 0 - 17 between Pinetown and Belhaven	\$450,000				\$450,000		
Washington Wake	CLNA	NS	Siding at Hinson (NS line MP 102) and Knightdale Transload (NS Line)	\$900,000						\$900,000
Stanly Union Mecklenburg	ACWR	NS	Rail Replacement and Surfacing from MP 368 to 380 between Midland and Charlotte	\$4,140,000	\$4,140,000					
Chatham Moore	ACWR	NS	Ties and Surfacing from MP 282 to 304 from Gulf to Robbins	\$1,275,000			\$1,275,000			
Mecklenburg	ACWR	NS	Ties and Surfacing from MP 382 to 386.5 in Charlotte	\$500,000				\$500,000		
Various	ACWR	NS	Complete Bridge Rehabilitation to include stringer replacement on Piedmont Subdivision from Mt Gilead to Charlotte. Submitted for FY 2018: Bridge rehab at 348.8, 353.5, 366.9, 353.8. Upgrade switches at 55.1 & 367.9. Upgrade storage tracks at 33.6. Facility at 33.	\$1,404,321		\$904,321			\$500,000	
Cumberland Hoke	AR	AR	Rail Replacement, Ties, Surfacing, from MP 0.2 to 20 from Fayetteville to Aberdeen. Submitted for FY 2018: Rail replacement from 28.15 to 28.95.	\$3,921,808	\$900,000	\$321,808	\$900,000	\$900,000	\$900,000	\$900,000
Alexander	ARC	ARC	Construct new Transload in Taylorsville. Submitted for FY 2018: Upgrade of Statesville Yard.	\$1,930,339		\$930,339				\$1,000,000
Gaston	P&N	NCDOT	Construct a new Siding for Superior Carriers Transload	\$4,740,000	\$600,000	\$4,740,000				
Lenoir	GTP	NCDOT	Construct new Interchange Track	\$1,000,000	\$1,000,000					
Carteret	CLNA	NCSPA	Demolish and rebuild west lead track	\$700,000		\$700,000				
Columbus	RJCS	RJCS	Welding of jointed rail	\$822,800		\$822,800				
Swain	GSMR	GSMR	Rail replacement from 83.3 to 84.8. Replace ties from 47-87. Rehab out of service track from 88.01-89.01.	\$1,255,809		\$1,255,809				
TOTAL				\$160,232,950	\$13,420,250	\$14,575,050	\$45,814,600	\$30,492,100	\$31,053,600	\$27,473,100
TOTAL NCDOT PORTION INCLUDING ADMINISTRATION CHARGES						\$5,960,000				



5-Year Spending Plan

Freight Rail and Rail Crossing Safety Improvement (FRRCSI) Capital Plan SFY 2018-2022

Counties	Railroad	Railroad	Description	Total Est. Cost (Millions)	SFY 2018	SFY 2018 Actual Submittals	SFY 2019	SFY 2020	SFY 2021	SFY 2022
Crossing Consolidation and Safety										
Rowan	NS/NCRR	NS/NCRR	Construct alternate access roadway for closure of at-grade crossing of Henderson Grove Church Road in Salisbury	\$500,000	\$500,000	\$500,000				
New Hanover	CSX	CSX	Wilmington TSS Signalization improvements and Crossing Consolidation	\$11,000,000	\$2,000,000		\$3,000,000	\$3,000,000	\$3,000,000	
Mecklenburg	NS/NCRR	NS/NCRR	Construct alternate access roadway for Stroup and Cochrane Private Crossing in Charlotte	\$1,500,000	\$1,000,000	\$1,500,000				
Union	CSX	CSX	Construct alternate access roadway to Helms Road for the closure of the at-grade crossing on Tory Path. Realign Helms crossing to align perpendicular with NC 75.	\$6,200,000		\$3,200,000	\$3,000,000			
Anson	CSX	CSX	Construct alternate access roadway for closure of at-grade crossing on Cowan Street in Lilesville	\$6,150,000		\$3,150,000		\$3,000,000		
Various	Various	Various	Crossing consolidation/signalization fund. Submitted for FY 2018: NS LED signal upgrades	\$2,300,000	\$500,000	\$300,000	\$500,000	\$500,000	\$500,000	\$500,000
TOTAL				\$27,650,000	\$4,000,000	\$8,650,000	\$6,500,000	\$6,500,000	\$3,500,000	\$500,000
Corridor Preservation										
Various	NCDOT	NCDOT	Maintain corridors	\$1,250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Warren Northampton	CSX	CSX	S & SA Line Acquisition	\$4,000,000			\$4,000,000			
TOTAL				\$5,250,000	\$250,000	\$250,000	\$4,250,000	\$250,000	\$250,000	\$250,000
Freight Diversion										
Pender New Hanover	NCDOT/ CSX	NCDOT/ CSX	W2CH- Rail Replacement, Ties, Surfacing, and Bridge Replacement at Smith Creek & Northeast Cape Fear River from Wallace to Wilmington	\$154,500,000	\$20,500,000		\$45,000,000	\$36,000,000	\$34,000,000	\$19,000,000
Various	CSX	CSX	A Line #20 Universal Crossovers Pembroke to CCX (2)	\$2,000,000				\$2,000,000		
Columbus	RJCS	RJCS	RJCS to CSX SE Line Planning and Engineering Design	\$2,000,000				\$2,000,000		
Brunswick	DOD	DOD	Construct Spur Track on off MOTSU Line and unloading Wharf on Cape Fear River for Siemens wide loads	\$7,000,000	\$7,000,000					
New Hanover	WTRY	WTRY	Construct additional Tracks to add capacity at Port of Wilmington Intermodal	\$1,250,545		\$1,250,544.80		\$2,000,000		
Mecklenburg	CSX	CSX	Construct additional Tracks to add capacity at Charlotte Intermodal Terminal Expansion	\$17,000,000			\$1,000,000	\$2,000,000	\$7,000,000	\$7,000,000
TOTAL				\$183,750,545	\$27,500,000	\$1,250,545	\$46,000,000	\$44,000,000	\$41,000,000	\$26,000,000
TOTAL NCDOT PORTION INCLUDING ADMINISTRATION CHARGES						\$635,000				
RIAP										
Various	Various	Various	RIAP contribution amount for economic development projects	\$12,000,000	\$2,000,000		\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
TOTAL				\$12,000,000	\$2,000,000		\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000

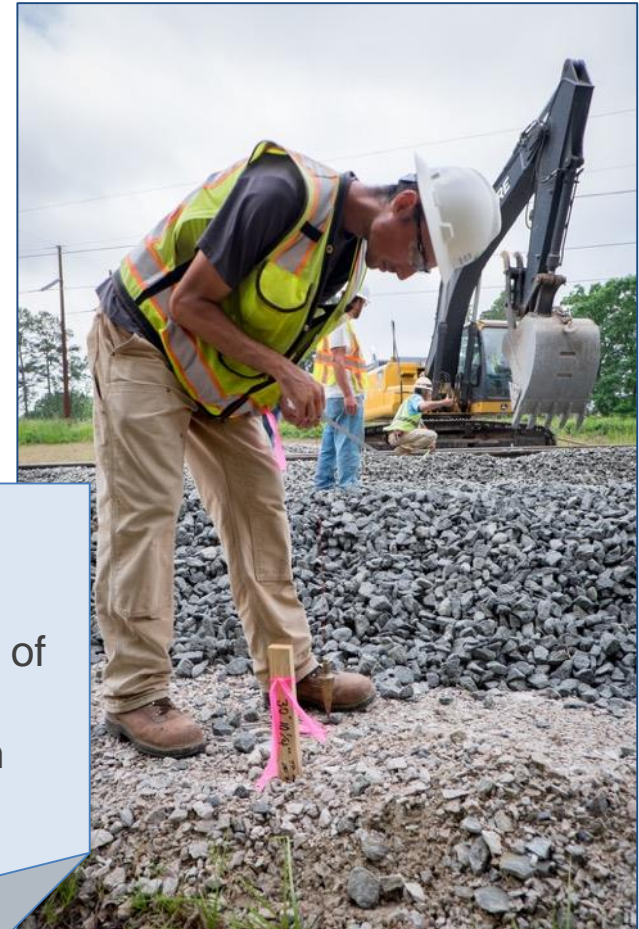


Challenges and Issues

- Short Line cash flow issues and lack of funding for required 50% match
- Variability in market conditions
 - Short Line railroads forecast between 2 and 3 years out. 5 years is optimistic.
- Continuance of FRRCSI funds beyond 5 years
- Shortage of licensed rail contractors to perform work

Training Program under development

Rail Division, Railway Association of NC and NC Community College System are developing a program to address the shortfall of rail contractors and trained railroad staff





Improvements Since Inception

Application Process

Improvements have been made to streamline the application and agreement process.

Cash Flow

Improvements have been made to expedite payment for ordered materials and in-progress construction activities.

Agreements

Development is underway for master agreements for each Short Line to accelerate the review and approval cycle for SIAP projects.



Testimonial

“CLNA has eagerly participated with NCDOT on numerous crossing safety projects over the last several years. This program has enabled us to improve many crossings, both in terms of protective devices and in terms of crossing surfaces.

Each type of improvement results in safer operations at the crossing, both for trains and for vehicles. We have added or upgraded gates at several locations which greatly reduces the likelihood of a crossing accident.

In addition, we have improved surfaces through tub crossings at high density locations or the addition of rail seal at other locations.

This makes the ride for vehicles crossing the tracks far smoother.

Working in concert with NCDOT, all of these projects have served to make the rail-road interface far safer than it had been previously.”



Testimonial

"The Freight Rail and Rail Crossing Safety Improvement Program has been critical to the success of the Atlantic & Western Railway, the Chesapeake & Albemarle Railroad, the North Carolina & Virginia Railroad, and the Wilmington Terminal Railroad. With the strong support of the State of North Carolina and the North Carolina Department of Transportation, these railroads have been able to accelerate the needed rail infrastructure improvements to provide shippers, the State, and the communities they traverse a safe and reliable rail transportation service that is key to economic development and job creation."

*David Bordner, Vice President of Transportation
G&W Coastal Region*



Questions/Discussion



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